

Application No.: 10/024311

Case No.: 56695US002

REMARKS

The Examiner has rejected claims 1 and 6-12 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Serra et al. (US 5,407,726). The Examiner has stated "Serra et al. disclose adhesive tapes comprising polymeric backing layer and a pressure sensitive adhesive layer (abstract). A reinforcing scrim may be used in the adhesive tape. The backing layer comprises polyethylene (col 2, ln 26-32), which is the same type of backing layer used by Applicant (page 3, line 19 of the present specification). A nonwoven scrim may be incorporated into the tape to enhance tearability and strength and can comprise either polyester or cotton (col 3, ln 19-47). A portion of the adhesive layer will be present in the interstices of the scrim (col 3, ln 27-29)."

The Examiner suggests that "Serra et al disclose the claimed invention except for the teaching that the index of refraction of the material of the fibers is within plus or minus 0.2 of the index of refraction of the adhesive and the percentage of light reflected from the tape as diffuse light was at least 15% before the tape was adhered to a substrate and was reduced by at least 10% or 60% by adhering the tape to the substrate."

The Examiner further suggests that "Although Serra et al. do not explicitly teach the claimed index refraction of the fibers and adhesive or the percentage of reflected light before and after adhering the tape to a substrate, it is reasonable to presume that these properties is inherent to the Serra et al. invention. Support for said presumption is found in the use of like materials (i.e. polyester or cotton nonwoven scrims, polyethylene backing layers, and adhesive layers). The burden is upon Applicant to provide otherwise. *In re Fitzgerald*, 205 USPQ 594."

The Examiner's rationale for the presumption that the tape structure claimed in the subject application is inherent in the structure described in the structure described by Serra et al. is not well founded. The M.P.E.P. in section 2112, page 51, under the heading "EXAMINER MUST PROVIDE RATIONALE OR EVIDENCE TENDING TO SHOW INHERENCY" states:

"The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that

Application No.: 10/024311

Case No.: 56695US002

result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art); *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.'" *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999)."

Serra et al describes a reinforced tape that, like the tape according to the present invention as claimed in claim 1, comprises a backing layer of polymeric material, a reinforcing scrim formed of fibers, and a layer of adhesive along a major surface of the backing layer covering the reinforcing scrim.

In the reinforced tape according to the present invention as claimed in claim 1, both the backing layer and the layer of adhesive are visually transparent, only portions of the reinforcing scrim are wetted by the adhesive so that the reinforcing scrim is visible along the backing layer, and the polymeric fibers and the transparent adhesive have similar indexes of refraction so that upon applying force to the backing to press the layer of adhesive against a substrate the layer of adhesive will wet the fibers, causing the reinforcing scrim to become significantly less visible than before the reinforced tape was adhered to the substrate.

Serra et al state that the backing layer for their tape is of a chlorinated polymeric material (col 2, ln 16-17) that preferably consists of chlorine in chlorinated polyethylene and polyethylene in a chlorinated polyethylene and polyethylene blend (col 2, ln 27-32), and can further include a heat stabilizer such as barium-cadmium, lead or others, antioxidants, and colorants such as carbon black, etc. (col 2, ln 32 - 40); and that the layer of adhesive for their tape can be of acrylics and rubber-based adhesive of per se known description, e.g., a natural or synthetic rubber elastomer. A typical adhesive of this description may include a blend of natural rubber, tackifier, and other reagents

Application No.: 10/024311

Case No.: 56695US002

performing specific desired functions (col 2, ln 41-46). While these lists of possible materials for the backing layer and layer of adhesive of the tape described by Serra et al include some materials from which those layers could be made to make those layers visually transparent, they also include materials that when included in a backing layer or layer of adhesive would normally not make those layers visually transparent (e.g., backing layers including lead or carbon black, and adhesive layers comprising natural rubber). Serra et al do not teach or suggest that both, or either one of their backing layer and their layer of adhesive should be visually transparent.

Serra et al describe applying the layer of the adhesive to the scrim and backing layer by "known coating techniques, e.g., calendaring, casting, or extrusion" (col 3, ln 65 - 68) without any specificity as to how thoroughly the adhesive should be pressed into engagement with the scrim and backing except to state (as noted by the Examiner) that "A portion of the adhesive layer will be present in the interstices of the scrim" (col 3, ln 27-29). This quotation may suggest that all rather than only a portion of the reinforcing scrim will be wetted by the adhesive when the tape is made. In any event, Serra et al provide no teaching to provide a tape in which only portions of a reinforcing scrim are wetted by an adhesive covering the reinforcing scrim.

Serra et al state that their scrim can be formed of synthetic fibers such as polyester or of polyester and cotton (col 3, ln 19 - 55). While there may be adhesives among those suggested by Serra et al that have indexes of refraction that are similar to such fibers, there may also be adhesives that do not.

Thus, the structural features of the reinforced tape claimed in claim 1 (i.e., a tape (1) in which both the backing layer and the layer of adhesive are visually transparent, (2) in which only portions of the reinforcing scrim are wetted by the adhesive so that the reinforcing scrim is visible along the backing layer, and (3) in which the polymeric fibers and the transparent adhesive have similar indexes of refraction so that upon applying force to the backing to press the layer of adhesive against a substrate the layer of adhesive will wet the fibers, causing the reinforcing scrim to become significantly less visible than before the reinforced tape was adhered to the substrate) are certainly not necessarily present in the tape described by Serra et al. Thus the Examiner's suggestion of inherency can not be supported.

Nor is there any teaching or suggestion in Serra et al that would make this combination of features obvious to one skilled in the art, as can be seen from the above discussion.

Application No.: 10/024311

Case No.: 56695US002

Claim 1 should be allowed.

Claims 2 through 12 are dependent on claim 1 and thus should be allowed for all of the reasons given above with respect to claim 1. Additionally, claims 2 through 12 recite further structural features that are not taught or suggested in the claimed combination by Serra et al or by a combination of Serra et al and Perez et al. For example, claim 6 recites that the index of refraction of the material of the fibers is within plus or minus 0.2 of the index of refraction of the adhesive; Claim 11 recites that when tested in accordance with the test described in this application, the percentage of light reflected from the claimed tape as diffuse light was at least 15% before the tape was adhered to a substrate, and was reduced by at least 10% by adhering the tape to a substrate; and claim 12 recites that when tested in accordance with the test described in this application, the percentage of light reflected from the tape as diffuse light was at least 15% before the tape was adhered to a substrate, and was reduced by at least 60% by adhering the tape to a substrate.

Reconsideration in view of these remarks and allowance of all of the claims now in this application are respectfully requested.

Respectfully submitted,

September 8, 2003
Date

By: W^m L. Huebsch
William L. Huebsch, Reg. No.: 25,990
Telephone No.: (651) 733-2835

Office of Intellectual Property Counsel
3M Innovative Properties Company
Facsimile No.: 651-736-3833

OFFICIAL

RECEIVED
CENTRAL FAX CENTER
SEP 09 2003